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ATTACHMENT

Planned inspection activities during the canning campaign.

The following information is an expansion of the "Talking points on 19960129"

1. SF rod measurements.

a. Weighing

Due to a difference in weight of spent fuel rods (6.6 kg), steel rods (~ 3.5 kg) and graphite rods

Gross gamma measurements

The purpose of the gross gamma measurements is to distinguish between irradiated rods and unirradiated rods.

The gross gamma measurements with HSGM are performed for all SF rods before their loading into the canisters. The HSGM (IF 104) processing unit at each measurement station is equipped with a gamma probe (SHF/IF 104) inserted into the collimator under water.

The background value should be recorded before each SF rod measurement. In case the gamma / background ratio is less or equal to 3, consult the operator for taking measures to reduce the background.

A threshold for the gross gamma measurement is set to 10 mSv/h. (The thresholds may be reviewed by the Agency in the light of initial experience).

All measurements will consist of 3 readings. It is expected that it will not be more than 1 min measurement time for each measurement.

One of the SF rods is used for a periodical performance check of the gross gamma monitors. The SF rod will be stored separately in the pond and will be used for an HSGM performance check at the beginning of each shift and any time it becomes necessary.

If a canister with verified SF rods was left with an open lid from a previous shift or there is an interruption of canning or no continuous Agency monitoring is provided during the current shift, at least one randomly selected rod from the canister should be verified again by gross gamma measurements and weighing before the canister lid will be closed.

The sequence of the measurements is the following:

1. Measure the background gamma rate with the SF rod handling tool positioned at the collimator at the beginning of each shift and check the HSGM performance with the selected SF rod. Record the results.

Measurements without the handling tool before

c. Clarifications on rods failing the test

The following actions are performed at any time during the shift on the rods stored separately because the weight and/or the gross gamma values are less than the thresholds:

- Check the HSGM performance with the reference SF rod and calibrate the weighing system with IAEA reference weights;
- Check the background and the weight of the handling tool used;
- Repeat the SF rod measurements and weighing;
- Examine, as appropriate, the condition of the rod with an underwater TV.

If the new gamma measurement and/or weighing results are still less or equal to the thresholds and the physical examination does not provide any explanation of these results:

- Request an explanation from the operator;
- Request to store the rod in an identifiable position in a pipe or a gridded canister;
- Record the rod position in the pond for further references;
- Inform the headquarters.

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